

ROBUST METHOD FOR FORMATING AND READING SECTOR IDENTIFIERS

ABSTRACT

For the purpose of providing sector-address information on optical disks, a robust header is realized by utilizing a very simple encoding method that allows asynchronous reading. In order to provide robustness and reliability, the header uses a biphasic data format to encode addressing information. The embossed header is further configured with redundant address-fields in a checkerboard pattern between adjacent tracks, in order to provide robustness for media-contamination. Each address-field starts with a unique address-mark and ends with parity-check information to provide reliable error-detection. The entire header can be decoded without the need for a slice-level, thus making it very tolerant to amplitude-variations and DC-offset variations. By combining these characteristics, a header is achieved which is reliable and inherently resistant to failures in providing sector-address information on optical disks.